

## WHAT IS CLAIMED IS:

1. A bicycle of the type driven by operation of a handle, comprising a front wheel and a rear wheel, which are installed at front and rear sides of a frame, a shaft rod to which the handle is connected, the shaft rod being integrally coupled at an upper certain position thereof to the frame at a right angle and connected at a lower end thereof to a center shaft of the front wheel, a sprocket provided at a lower portion of the frame near the rear wheel, the sprocket being formed with a pedal, a chain for transmitting a driving force of the pedal formed at the sprocket to the rear wheel, and a saddle installed at an upper portion of the frame, further comprising:

a hinge installed at the shaft rod so as to enable the handle to rotate forward or backward by means of the hinge, the handle being bent by a constant angle on the basis of the hinge, thereby being divided into both upper and lower portions;

an elongated guide bore formed at the lower portion of the handle;

a roller inserted inside the guide bore so as to move upward and downward along the guide bore;

a rod connected at an upper end thereof to the roller so as to move upward and downward in a rectilinear course according to pulling and pushing operations of the handle;

a rotating cam associated with a lower end of the rod by means of a connection link;

a driving gear installed at one side of the cam so as to rotate along with the cam;

5 a ratchet provided at an internal portion of the driving gear so as to rotate in only one direction due to a stopper;

an auxiliary sprocket installed around an outer periphery of the driving gear so as to rotate along with the driving gear; and

10 a center shaft gear integrally installed to the center shaft of the front wheel so as to be associated with the auxiliary sprocket through a chain.

2. The bicycle as set forth in claim 1, wherein the shaft  
15 rod is formed near an upper end thereof with a fixing hole, and the handle is formed at a certain position with a pin hole, in correspondence to the fixing hole,

whereby in a state wherein the pin hole of the handle and the fixing hole of the shaft rod are aligned, a pin is inserted  
20 therethrough so as to fix the handle to the shaft rod.